Table 20: Breakdown of the Types of Grains Reported by California Children (N=334)

Types of Grains	Mean Servings (oz-eq)
Total Grains	5.23
Grains, Flour and Dry Mixes	0.93
Loaf-type Bread and Plain Rolls	1.32
Other Breads (quick breads, corn muffins, tortillas)	1.33
Crackers	0.05
Pasta	0.38
Ready-to-eat Cereal (not presweetened)	0.26
Ready-to-eat Cereal (presweetened)	0.45
Cakes, Cookies, Pies, Pastries, Danish, Doughnuts and Cobblers	0.30
Snack Bars	0.04
Snack Chips	0.12
Popcorn	0.04

Grain servings are defined per the *Dietary Guidelines for Americans 2005* as 1 slice of bread (16 grams of flour), 1 ounce of ready-to-eat cereal, $\frac{1}{2}$ cup of cooked cereal, rice or pasta. FDA serving sizes are used for other food items in this classification when the Dietary Guidelines do not apply.

Table 21: Total Servings of Grains Reported by California Children (N=334)

	Mean Servings (oz-eq)			
	Total Grains	Whole Grains ¹	Some Whole Grains ²	Refined Grains ³
Total	5.2	1.4	0.4	3.5
Gender				
Boy	5.1	1.2	0.4	3.5
Girl	5.3	1.6	0.3	3.4
Ethnicity				
Hispanic	5.0 *	1.5	0.3	3.2 **
Non-Hispanic	5.8	1.1	0.5	4.2
Parent Education				<u> </u>
Less than High School	5.2	1.8 ** a	0.2 * a	3.2
High School Graduate	5.5	1.1 b	0.5 a	4.0
Some College/Graduate	5.1	1.2 b	0.4 a	3.5
Overweight Status				
Not Overweight	5.3	1.5	0.4	3.4
Overweight/Obese	5.2	1.2	0.3	3.7
Physical Activity				
<u>></u> 60 minutes	5.2	1.6	0.4	3.3
< 60 minutes	5.3	1.2	0.3	3.8
School Breakfast				
Yes	4.9	1.0 *	0.3	3.6
No	5.3	1.5	0.4	3.4
School Lunch				
Yes	5.6	1.5	0.3	3.9
No	5.1	1.4	0.4	3.3
Fast Food				
Yes	6.6 ***	1.1	0.5	5.1 ***
No	5.0	1.5	0.3	3.2
Nutrition Lesson				
Yes	5.2	1.5	0.4	3.3
No	5.3	1.3	0.4	3.6

Grain servings are defined per the *Dietary Guidelines for Americans 2005* as 1 slice of bread (16 grams of flour), 1 ounce of ready-to-eat cereal, $\frac{1}{2}$ cup of cooked cereal, rice or pasta. FDA serving sizes are used for other food items in this classification when the Dietary Guidelines do not apply.

A box around a group of numbers signifies that differences observed within this group are statistically significant.

Categories sharing a common superscript (a,b,c) are not statistically different from each other (Tukey's test at a procedure-wise error rate=.05). ANOVA

¹ Whole grains include grain products in which a whole grain ingredient is the first ingredient on the food label

² Some whole grains include grain products in which a whole grain (e.g., whole wheat flour, oatmeal, brown rice, whole rye meal) or a partial whole grain ingredient (e.g., wheat bran, wheat germ) appears anywhere else on the label.

³ Refined grains include grain products in which no whole grain ingredients are identified on the label.

^{*} p<.05

^{**} p<.01

^{***} p<.001

Table 23: Proportion of California Children Meeting the Recommendations for Grains, Whole Grains, and Enriched Grains (N=334)

	Percent Eating Recommended Servings			
	Total Grains (5-7 oz-eq)	Whole Grains (2½-3½ oz-eq)		
Total	49.7	17.1		
Gender				
Boy	48.4	11.8		
Girl	50.8	21.5		
Ethnicity				
Hispanic	47.6	17.2		
Non-Hispanic	56.0	16.7		
Parent Education				
Less than High School	52.7	22.1		
High School Graduate	50.7	14.1		
Some College/Graduate	46.1	13.3		
Overweight Status				
Not Overweight	46.6	18.9		
Overweight/Obese	52.4	15.1		
Physical Activity				
> 60 minutes	49.8	20.6		
< 60 minutes	50.4	10.9		
School Breakfast				
Yes	38.6	9.1		
No	51.4	18.3		
School Lunch				
Yes	57.6	17.6		
No	47.0	16.9		
Fast Food				
Yes	69.8 **	11.6		
No	46.7	17.9		
Nutrition Lesson				
Yes	48.8	20.6 *		
No	51.3	10.9		
ı	31.3	10.5		

Grain servings are defined per the *Dietary Guidelines for Americans 2005* as 1 slice of bread (16 grams of flour), 1 ounce of ready-to-eat cereal, $\frac{1}{2}$ cup of cooked cereal, rice or pasta. FDA serving sizes are used for other food items in this classification when the Dietary Guidelines do not apply. Based on the *Dietary Guidelines for Americans 2010*. Recommendations vary by age, gender, and level of physical activity. For children ages 9-11, the recommended amount of whole grains is $2\frac{1}{2}$ - $3\frac{1}{2}$ ounce-equivalents along with $2\frac{1}{2}$ - $3\frac{1}{2}$ ounce-equivalents of grains per day. The amounts used here are appropriate for children who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

A box around a group of numbers signifies that differences observed within this group are statistically significant.

Chi Square Test

^{*} p<.05

^{**} p<.01

^{***} p<.001

Table 24: Servings of Cereal and Cereal Type Reported by California Children Out of Cereal Eaters (N=334)

	Out of Cereal Eaters			
	Mean Servings Percent of Cereal Reported			
	of Cereal	Presweetened ¹	Whole Grain ²	
Total	0.7	28.1	24.6	
Gender				
Boy	0.7	27.5	23.5	
Girl	0.8	28.7	25.4	
Ethnicity				
Hispanic	0.7	27.6	26.0	
Non-Hispanic	0.7	29.8	20.2	
Parent Education				
Less than High School	0.8	28.2	26.0	
High School Graduate	0.7	31.0	21.1	
Some College/Graduate	0.7	26.6	25.8	
Overweight Status				
Not Overweight	0.8	30.4	27.0	
Overweight/Obese	0.7	29.4	22.2	
Physical Activity				
> 60 minutes	0.8	30.1	25.8	
< 60 minutes	0.6	26.1	23.5	
School Breakfast				
Yes	0.6	25.0	27.3	
No	0.7	28.6	24.1	
School Lunch				
Yes	0.7	27.1	23.5	
No	0.7	28.5	24.9	
Fast Food				
Yes	0.7	30.2	18.6	
No	0.7	27.8	25.4	
Nutrition Lesson				
Yes	0.7	26.3	22.0	
No	0.7	31.1	27.7	

Grain servings are defined per the *Dietary Guidelines for Americans 2005* as 1 slice of bread (16 grams of flour), 1 ounce of ready-to-eat cereal, ½ cup of cooked cereal, rice or pasta. FDA serving sizes are used for other food items in this classification when the Dietary Guidelines do not apply.

A box around a group of numbers signifies that differences observed within this group are statistically significant.

Categories sharing a common superscript (a,b,c) are not statistically different from each other (Tukey's test at a procedure-wise error rate=.05).

ANOVA

Chi Square Test

¹ Presweetened cereals contain 21.2% total sugars per WIC guidelines.

² Whole grains include grain products in which a whole grain ingredient is the first ingredient on the food label.

^{*} p<.05

^{**} p<.01

^{***} p<.001